

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 94-644-G - ORDER NO. 95-792✓
MARCH 30, 1995

IN RE: Application of South Carolina Electric) ORDER RULING
 & Gas Company for Approval of an) ON INTEGRATED
 Integrated Resource Plan.) RESOURCE PLAN

This matter comes before the Public Service Commission of South Carolina (the Commission) for consideration of the Integrated Resource Plan (IRP) filed by South Carolina Electric & Gas Company (SCE&G or the Company).

Subsequent to the publication of Notice, the following parties intervened in this Docket in addition to the Commission Staff (the Staff): the Consumer Advocate for the State of South Carolina (the Consumer Advocate) and the South Carolina Energy Users Committee (SCEUC).

The Commission, in Docket No. 91-677-G, issued Order No. 93-145 on February 8, 1993, and Order No. 93-412 in May 1993, setting forth an IRP process, which must be complied with by gas utilities under its jurisdiction. These procedures were developed through a collaborative process which included the Staff, the Consumer Advocate's office, Piedmont, SCE&G, Pipeline, SCE&G, Nucor Steel, and SCEUC. Upon agreement among the parties, the procedures were submitted to the Commission for consideration and

were approved under Docket No. 91-677-G.

In addition to the State Law of South Carolina, and the IRP procedures established by the Commission, the Federal Energy Policy Act of 1992 (EPACT) under §115, addresses the importance of an IRP process for gas utilities and sets forth specific considerations which the states were required to address concerning integrated resource planning.

IRP is a economic planning process which is designed to determine a mix of energy resources with the lowest total system costs at which a utility can deliver reliable energy services to its customers. The IRP process is ongoing and must be dynamic and flexible in nature, allowing for periodic changes within the utility planning process, and also within the Commission's objectives and procedures which define the process.

IRP supplements traditional utility regulation by focusing on the utility planning process. Utility resource development decisions are reviewed and evaluated prior to the extensive commitment of time and capital. IRP should minimize the probability that utilities, regulators, and consumers would be confronted with costs related to avoided or inappropriate resource investments, while helping to ensure that an adequate supply of energy is available.

The IRP process established under Docket No. 91-677-G, provides for comprehensive and periodic review of resource options, but, at the same time, it is not intended to remove the ultimate responsibility for planning from the utility. The

utility maintains ultimate responsibility for its planning process, but it must evaluate all reasonable resource options; both supply-side and demand-side.

The objective of the gas IRP process is the development of a utility planning process that results in the minimization of long-run total system costs and produces the least cost to consumers consistent with the availability of an adequate and reliable supply of energy, while maintaining system flexibility, improved efficiencies of energy utilization, improved customer service, and considering environmental impacts.

A collaborative process involving the parties of record was involved in the review of SCE&G's IRP. Through this process, issues were identified and addressed with many matters being resolved.

The IRP filed by each utility is complex and comprehensive, and the collaborative process assists the other parties, including the Staff, in conducting a more thorough review. In addition to the collaborative process, the Staff and other parties conduct independent reviews and analyses of each IRP in an effort to identify and resolve issues. Many of the Commission's Departments are involved to some extent in reviewing an IRP. Various participants within the review process employ outside consultants to assist in their review.

Subsequent to a number of collaborative meetings in this Docket, a hearing was held on March 22, 1995, with the Honorable Rudolph Mitchell, presiding. SCE&G was represented by Frank Mood,

Esquire, and Sarena D. Burch, Esquire. The Company presented the testimony of Warren A. Darby. The Consumer Advocate was represented by Elliott F. Elam, Jr., Esquire. SCEUC was represented by Arthur G. Fusco, Esquire. The Commission Staff was represented by F. David Butler, General Counsel. The testimony of R. Dow Bailey, Carey M. Flynt, James E. Nicholson, and George A. Perrault for the Company and Brent A. Sires of the Commission Staff was stipulated into the record as if given orally from the stand. Also, the prefiled exhibits of the Company witnesses and the Appendix of Brent Sires were entered into the evidence as hearing exhibits.

It was announced that a Stipulation had been reached between SCE&G, the Consumer Advocate, and SCEUC. The terms of the Stipulation were also agreed to by the Commission Staff.

Warren A. Darby testified for SCE&G. Darby explained how the Company's IRP was formulated, what research was done, what outside consultants were employed, and other details. The prefiled testimony of the Staff witness, Brent A. Sires, explained the IRP process, and concluded that the Company's IRP is reasonably consistent with the objective statement contained in Order No. 93-145 and the overall intent of the Commission's IRP procedures.

The Commission has examined the Stipulation in the case, and finds the terms therein to be reasonably consistent with the Commission's IRP procedures. The Stipulation was entered into evidence as a Hearing Exhibit. We think that the Stipulation among the parties correctly reduces to writing the Commission

findings for this Order. (See Exhibit A.) Item II.B.2 states:

The Company's IRP is reasonably consistent with the objective statement contained in Order No. 93-145 and the overall intent of the Commission's IRP procedures. It is also reasonably consistent with the requirements of the provisions of the South Carolina Energy Act..., and with Section 115 of the Energy Policy Act of 1992 (EPACT).

Witness Sires expressed Staff's conclusion that the IRP filing of SCE&G is "reasonably consistent" which means: (a) The utility has made an adequate and good faith effort to address and comply with the 11 pages of procedures in the objective statement set forth under Docket No. 91-677-G, including the issues which Staff considers very important such as Demand-Side Management analysis, Supply-Side analysis, cost-recovery criteria, timely compliance with filing requirements, and responsiveness through the collaborative process; (b) There are no apparent significant deliberate omissions or violations of the existing IRP procedures in the objective statements sufficient to warrant rejection of the IRP filing; and (C) Any relevant weaknesses within the IRP filing could be addressed through the implementation of the Staff's recommendations, found in the Stipulation.

The Staff is concerned that load building DSM programs might be used by a utility primarily as a marketing tool with a focus largely on enhancing sales. The Staff is of the opinion that such an approach would not be consistent with the intent of the SCECA for DSM programs. To address this concern, Staff feels that both electric and gas load building programs should seek to incorporate technologies, which offer more efficient end-use options. Thus, a

load building program which increases sales can enable the utility to make more efficient use of its existing capacity by spreading fixed costs, or contributing to greater end-use efficiency.

The Company conveyed through the collaborative process that it would not seek to recover incremental IRP related costs related to this filing unless these expenses fall within a historical test period used by SCE&G as part of a rate case filing. In addition, since the Company placed a specific level of DSM expenses in rates as part of its rate case filing under Docket No. 89-245-G, SCE&G does not plan to seek any deferral mechanism of its DSM costs at this time. The Commission takes note of these issues regarding IRP and DSM costs and adopts them as part of SCE&G's IRP proceeding.

IT IS THEREFORE ORDERED THAT:

1. Both SCE&G's Integrated Resource Plan filing and the Stipulation are reasonably consistent with the Commission's IRP procedures.
2. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:


Chairman

ATTEST:


Executive Director

(SEAL)

SOUTH CAROLINA ELECTRIC & GAS COMPANY

STIPULATION

Docket No. 94-644-G

I. PREAMBLE

A. S.C. Code Ann. § 58-37-20 (Supp. 1993), The South Carolina Energy Conservation and Efficiency Act of 1992 ("SCECEA"), requires the South Carolina Public Service Commission ("PSC," "Commission") to adopt procedures which encourage public utilities providing gas service subject to the jurisdiction of the Commission to invest in cost-effective, energy efficient technologies and energy conservation programs. By Order No. 93-145, dated February 8, 1993, in Docket No. 91-677-G, the Commission required that proceedings should be initiated to address the subject of Integrated Resource Planning ("IRP") by natural gas utilities.

B. By Order No. 93-412, dated May 7, 1993, in the aforesaid docket, the Commission adopted additional procedures for the filing of IRPs by natural gas utilities ("Gas IRP Procedures"). These Procedures required, *inter alia*, that South Carolina Electric & Gas Company ("Company," "SCE&G") file an IRP on or before October 1, 1994.

C. On September 30, 1994, SCE&G filed its IRP, which was assigned Docket No. 94-644-G.

D. The Consumer Advocate for the State of South Carolina ("Consumer Advocate") and the South Carolina Energy Users Committee ("Energy Users") were duly permitted to intervene in this docket.

E. By responses dated January 19, 1995 and February 6, 1995, SCE&G answered the Consumer Advocate's first and second sets of interrogatories. By response dated February 3, 1995, SCE&G provided the information requested in the Energy Users Data Request No. 1.

F. Collaborative conferences were held by the parties and the Commission Staff on January 20, 1995 and February 3, 1995, at which SCE&G discussed in detail its IRP and IRP process and responded to questions from the Staff and the parties' counsel and consultants.

II. STIPULATION

A. The following stipulation is agreed to by and among the signatory parties. It is not opposed by the Commission Staff.

B. SCE&G's IRP

1. SCE&G has made a good faith effort to comply with the S.C. Code Ann. § 58-37-20, et seq., supra, and the Gas IRP Procedures. Further, the Demand-Side Management ("DSM") programs included in the Company's IRP fall within the definition of "demand-side activity" in Section 58-37-20 of the SCECEA. Under the SCECEA, "demand-side activity" means "a program conducted or proposed by . . . [a] public utility providing gas service for the reduction or more efficient use of energy requirements of the utility or its customers, including, but not limited to, utility transmission and distribution system efficiency, customer conservation and efficiency, load management, cogeneration, and renewable energy technologies." The DSM programs set forth by the Company in its IRP filing must prove to be consistent with the Commission's Gas IRP Procedures to become eligible for incentives as actual DSM programs/options.

2. The Company's IRP is reasonably consistent with the objective statement contained in Order No. 93-145 and the overall intent of the Commission's Gas IRP Procedures. It is also reasonably consistent with the requirements of the provisions of the South Carolina Energy Act [and, in particular, with the provisions of Section 58-37-10(2) AND Section 58-37-40(A) and with Section 115 of the Energy Policy Act of 1992.]

3. The Company has screened the load-reducing DSM programs considered for inclusion in its July 1994 filing, using the Participant Test, the Rate Impact Measure Test (RIM Test), the Total Resource Cost Test (TRC Test), and the Utility Cost Test (UTC). For load-increasing measures, only the RIM test was utilized. The results of these tests have been provided the Commission and the Parties either in the Company's October 1994 filing, in responses to interrogatories, or through materials and discussions provided at the collaborative conferences.

4. The resource options incorporated in the Company's IRP should be adequate to satisfy the projected energy requirements of the Company's customers, given current information and excluding any events which were not included in the Company's planning process.

C. Cost Recovery

1. All cost recovery for demand-side management (DSM) and/or supply-side options incorporated in the Company's IRP should be

consistent with the Commission's Natural Gas IRP Order No. 93-145 and with the SCECEA. The following three criteria must be met before the recovery of any DSM cost with respect to a particular DSM program is appropriate:

- (i) Prior to implementation or modification of a DSM Program, the Company must provide justification that the program has a reasonable potential for being cost-effective. For ultimate cost-recovery, justification of a DSM program includes establishing a reasonable degree of cost-effectiveness using an appropriate method of analysis.
- (ii) During implementation of a DSM program, the Company must take steps to assure that the program is being implemented in a just and reasonable manner and that it continues to have the potential for being cost-effective. The Company should justify those DSM costs which exceed projected levels and should seek to modify and/or terminate those options which are not cost-effective and do not have the potential to be cost-effective.
- (iii) At the time that the Company seeks to recover its DSM costs, the Company must demonstrate that the level of benefits achieved from a program is consistent with projected benefits and that the program has achieved an appropriate level of benefits at a reasonable cost. The Company must contrast the projected cost/benefits with the actual cost/benefits achieved and justify any failure to achieve the projected benefits. The failure of the Company to achieve the projected level of benefits for any specific DSM program, in and of itself, does not mean that the costs relating to the program are not recoverable.

2. "IRP Costs" include those costs incurred by the Company to prepare, administer and implement the Company's IRP. In a subsequent rate proceeding, the Company should be able to recover all reasonably incurred IRP costs which are found to be consistent with the provisions of this Stipulation and all related Commission procedures and orders. The PSC Staff believes that, since the objective of the IRP is to minimize system costs, all customers are intended to benefit, and no one customer class should bear the full burden of the IRP, excluding the direct costs of specific DSM activities. That is, the Staff believes that direct DSM costs should be borne by the customer class benefiting from a particular program, while the general IRP costs should be equitably allocated to all customers.

3. "DSM Costs" are a portion of the total IRP costs and include the following costs incurred in connection with DSM programs which are found to be reasonably consistent with the objective statement contained in Order No. 93-145 and the overall intent of the Commission's IRP process:

- (i) Those costs incurred by the Company to administer, implement, monitor and evaluate its DSM programs.
- (ii) Incentive payments and rebates provided to or on behalf of the Company's customers pursuant to a DSM program.
- (iii) Properly identified reduced revenues to the Company that result from implementation of a DSM program, often referred to as "lost revenue."

4. "Utility Incentives" include special incentives made available to the Company to encourage or reward it for participation in a DSM program and comply with specific requirements of Section 58-37-20 of the SCECEA.

5. "IRP Costs," "DSM Costs," "Utility Incentives," and "Lost Revenue" are not in issue with respect to the Company's October 1994 filing, because the Company does not presently seek recovery of such costs in this docket. In future rate proceedings, SCE&G intends to request cost recovery for all IRP/DSM activities.

6. The Company may incur additional IRP Costs in the future in connection with any amendments or modifications with its October 1994 IRP filing. The Company should be permitted to recover prudently incurred additional IRP Costs plus carrying costs at the Company's allowed return on investment by amortizing them over an appropriate period of time in future rate cases.

7. (a) The Company may incur DSM Costs of the type referred to in Section C.3.(i) in the future. The Company should be permitted to recover prudently incurred DSM Costs plus carrying costs at the Company's allowed return on investment by amortizing them over an appropriate period of time in future rate cases.

(b) The Company may incur DSM Costs of the type referred to in Section C.3.(ii) in the future. The Company should be permitted to recover prudently incurred DSM Costs plus carrying costs at the Company's allowed return on investment through a "tracking" mechanism by which the costs and associated carrying costs are recorded in a deferred account and recovered in future rates.

(c) The Company may incur DSM Costs of the type referred to in Section C.3.(iii) in the future. The actual treatment of "lost revenues" will be determined at some future date. However,

the treatment of such lost revenues when properly determined, could be consistent with the treatment of other prudently incurred costs. Therefore, the Company could be permitted to recover prudently incurred DSM Costs plus carrying costs at the Company's allowed return on investment by amortizing them over an appropriate period of time in future rate cases.

8. The Company will file quarterly updates with the Commission showing DSM expenditures on an aggregate basis and also by accounting categories and DSM options/programs.

D. DSM Impact Measurement Process

1. On October 1, 1995, the Company will file an initial formal DSM impact measurement process with its Short-Term Action Plan. This DSM impact measurement process should be enhanced periodically by the Company, subject to Commission consideration or as required by the Commission. The DSM impact measurement plan should seek to establish with reasonable confidence:

- (i) The type and magnitude of the impacts of each DSM program or option; and
- (ii) The estimated effects expected to be achieved over the life of a program and the actual effects attributed to a program over a given time period. The DSM impact measurement process should seek to rule out alternative explanations and factors such as weather, snap-back effects, free-riders, changing consumer tastes impacting usage under an option, errors resulting from modeling assumptions, technological and equipment changes, and any other such factors; and
- (iii) The durability of the actual impacts of the program over time; and
- (iv) The degree of market penetration of each option; and
- (v) The cost-effectiveness of each option in achieving the impacts.

2. The Company recognizes that the Commission and the Staff consider the reliability, credibility, and dependability of the DSM impacts and outcomes to be of paramount importance. However, the impact measurement plan need not evaluate each DSM program with the same degree of rigor and effort. It is important in the measurement process that the costs of evaluation be balanced against the value of the information obtained.

3. The Company accepts responsibility within the IRP process for fully justifying, to the satisfaction of the Commission, its overall IRP and the resource options incorporated within the plan, especially the DSM resource options/programs.

E. Future IRPs

1. The Company agrees with the following list of recommendations developed by the Commission Staff to be incorporated in developing future IRPs:

- (i) The Company will seek to develop an appropriate portfolio of cost-effective DSM options/programs with special consideration given to energy efficiency options, peak reduction options, and conservation programs which will be incorporated within a comprehensive IRP. The Company will consider combining individual conservation programs which may be marginal with other cost-effective programs to develop a program package that is cost-effective. It is not the intent of the Staff to force or encourage the Company to adopt energy conservation programs or combinations of programs which are not cost-effective.
- (ii) The Company may make use of pilot projects, where feasible, to evaluate uncertainties related to DSM options.
- (iii) Where appropriate, the Company will pursue end-use analysis, in a cost-effective manner, to assist in understanding consumer behavior.
- (iv) The Company will develop a reasonable, cost-effective, comprehensive methodology for measuring the impacts of DSM options consistent with Paragraph II.C.1.
- (v) The Company will continue to actively explore and evaluate new DSM technologies and programs.
- (vi) The Company will establish an accounting mechanism for process evaluation which will enable the Commission Accounting Department to adequately track all DSM related costs.
- (vii) In carrying out the IRP process, the Company will attempt to avoid circumstances which might produce an unfair competitive advantage by the Company over any small business engaged in the design, sale, supply, installation or servicing of energy conservation, energy efficiency, or other demand-side management measures.

- (viii) The Company will identify the areas where it anticipates the greatest degree of load growth in the future and will identify how the Company will attempt to structure DSM programs to deal with the anticipated growth.
- (ix) The Company will incorporate technologies within any load building program which offer more efficient end use options to customers while contributing to system efficiencies.
- (x) Load building DSM programs analyses will incorporate relevant system impacts of such programs such as increases in the need for future gas supply and gas supply capacity facilities.
- (xi) The Company will voluntarily adopt rate impact constraints related to its DSM programs. This will involve establishing DSM rate impact percentages for a given time period.
- (xii) The Company will advise and provide the Commission Staff with an overview of its supply side activities related to the IRP process on a periodic basis.

2. The Company believes that the procedures set forth in Paragraph II.E.3 should be followed for filing new, modified (including those options proposed for elimination) or pilot DSM programs. An overriding concern of this process is that Staff and the other parties be provided the necessary information in a timely manner by the Company so that the Staff and parties have an understanding of the new, modified or pilot DSM programs. Intervenor are to be allowed to discuss any relevant issues with the Company, and a good faith effort should be made by all parties to resolve any disputed issues within the allotted time frame. This procedure will not prejudice the right of any party of record to question the appropriateness of the DSM programs or their related costs in the future. Moreover, the Company must still comply with the cost recovery requirements set forth by the Commission. The Company, however, shall not be required to share any confidential, proprietary or competitively-sensitive information with any party of record who is a competitor of the Company.

3. The procedure for the filing of new, modified or pilot DSM programs shall be as follows:

- (i) Filings with the Commission of new, modified or pilot DSM programs for evaluation of their reasonableness, consistency with the IRP objective statement and procedures, and cost-effectiveness

shall be provided to parties of the existing docket. These filings will provide the Commission, the Staff, and the parties of record with information on the proposed new, modified or pilot DSM programs.

- (ii) A list of minimum filing requirements for new, modified or pilot DSM program filings has been included as Appendix A of the Commission's GAS IRP process as of May 5, 1993. These requirements may be modified from time to time by the Staff. Any party who disagrees with any filing requirement proposed by the Staff and who is unable to resolve his or her differences with the Staff may seek resolution of the disagreement by the Commission.
- (iii) The Company may meet with any interested party of record at the request of the party to discuss the new, modified or pilot DSM program. The parties will have 60 days from the date of the filing to resolve any issue, in accordance with Commission Order 93-412.
- (iv) Any party wishing to express an opinion on the DSM filing may file a letter of comment with the Commission. This letter will be retained within the docket file. Comments are not, however, required to protect a party's right to litigate the reasonableness of a DSM program at a future date.

Compliance with these filing requirements will allow the Company to:

- (a) proceed with implementation of the new, modified or pilot DSM program as filed or with the elimination of any program no longer consistent with the Commission's IRP objectives, and
- (b) include the specified DSM costs within a deferral account consistent with related IRP procedures established by this Commission.

4. (a) The Company agrees with the following list of recommendations developed by the Consumer Advocate:

- (i) In its next IRP filing, the Company will provide a comprehensive economic analysis of the incremental capacity that it will have to acquire in order to meet growing peak day and annual requirements at reasonable cost. This analysis shall be based on the quantitative comparison of all reasonable alternatives and

shall address the size, type, cost and timing of new capacity acquisition.

- (ii) In its next IRP filing, the Company will prepare an estimate of avoided costs, taking into consideration all incremental supply resources that it may have to acquire over the lifetime of all DSM programs considered in the IRP. In addition, in estimating avoided capacity cost for each type of avoided load, the Company will explicitly describe avoided capacity, including its type, size in Mmbtu/day, charge rate, and annual volume avoided due to DSM.
- (iii) The Company will intervene in S.C.P.S.C. Docket No. 94-719-G concerning the effects of FERC Order 636 on South Carolina Pipeline Corporation. In this proceeding, the Company will take whatever actions it deems appropriate for the benefit of the Company and its customers.
- (iv) If an order has been entered by the Commission in Docket No. 94-719-G, and adequate lead time reasonably permits at the time of the Company's 1995 PGA proceeding, as part of its filing, SCE&G will provide a status report assessing the impact of Commission decisions in the aforesaid order.
- (v) If adequate lead time reasonably permits, in the first PGA proceeding subsequent to the Commission's order in Docket No. 94-719-G, SCE&G, as part of its filing, will address any changes in capacity mix resulting from the Commission decisions in Docket No. 94-719-G.
- (vi) In its future IRP filings, SCE&G will develop a mix of supply-side and demand-side resources satisfying the following conditions:
 - (aa) A projection of the future peak day and annual service requirements should be adjusted for the anticipated peak day and annual impact of all DSM measures that pass the benefit-cost screening tests and are implemented by the Company;
 - (bb) A mix of supply-side resources should ensure that the future peak day and annual requirements described in

subsection (aa) above are met at reasonable cost.

(vii) In future IRP filings, SCE&G will provide the following information:

(aa) For proposed DSM programs: the market potential for each measure (in terms of annual gas energy savings and number of participants) and the expected penetration rate for each measure relative to the market potential (in terms of annual gas energy savings and number of participants).

(bb) For existing programs: the market potential for each measure (in terms of annual gas energy savings and number of participants) and the achieved penetration rate for each measure relative to the market potential (in terms of annual gas energy savings and number of participants).

(viii) The Energy Policy Act of 1992 (EPACT 92) and the National Appliance Energy Conservation Act (NAECA) establish minimum efficiency standards which the Company is required to meet. If cost-effective and prudent, SCE&G will reasonably attempt to exceed the minimum efficiency standards established under the foregoing Acts.

(b) The Company agrees with the following Staff opinion:

Staff is of the opinion that the Company should seek to develop a more comprehensive IRP in the future with greater consideration of Supply-Side impacts. However, the prudence of SCE&G's gas purchasing practices will continue to be determined under the provisions of Commission Order 91-927 and will not be subject to review in the IRP proceedings. The future IRP filings of the Company are to provide a comprehensive economic analysis of the incremental capacity that would have to be acquired to meet growing peak day and annual requirements at least cost consistent with the Commission's IRP objective statement and procedures. Such an analysis should be based on the quantitative comparison of all reasonable alternatives and address the size, type, cost, and timing of new supply capacity additions. Within future IRPs, the Company is to prepare an estimate

of avoided costs, taking into consideration all reasonable incremental supply resources that it may acquire over the lifetime of the DSM programs included within the IRP. The Company will estimate avoided capacity cost for each type of avoided load and also describe the avoided capacity.

5. In the event that there are no future IRPs, SCE&G will continue to address long-term supply issues and its long-range strategy for gas supply in rate cases and/or PGA cases, as the Commission may deem appropriate.

F. DSM Implementation

The Company will do its best to ensure that no misinformation is conveyed to potential participants during the marketing of any DSM program. In addition, the marketing process will provide sufficient information for an appropriate consideration by a utility's customer concerning whether or not to become a DSM program participant.

WHEREFORE, the Parties hereto so stipulate and agree:

SOUTH CAROLINA ELECTRIC & GAS COMPANY

By: James O. McLeod, Jr., Its Attorney

Date: 3/21/95

SOUTH CAROLINA DEPARTMENT OF
CONSUMER AFFAIRS

By: Steph S. Cant

Date: 3/21/95

SOUTH CAROLINA ENERGY USERS

By: Arthur L. Jones, its attorney

Date: 3/21/95